

## PORTLAND HARBOR

Evaluation of alternatives

**Congressional Briefing**  
**November 25, 2015**  
**Region 10**



### Overview

- NRRB/CSTAG Meeting Overview
- Highlights from the Remedial Investigation
- Highlights from the Feasibility Study
- Option Presented to NRRB/CSTAG
- Focused Request to NRRB/CSTAG for input
- Summary of Comments from State and Tribes
- Decision Tree
- Cost Estimates
- Allocation
- Public Process and Schedule

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### NRRB/CSTAG Meeting Overview

- NRRB and CSTAG received comments from:
  - the State of Oregon
  - the Lower Willamette Group
  - the Community Advisory Group
  - Yakama, Grand Ronde, Siletz, Warm Springs, Umatilla, Nez Perce Tribes
- EPA Presentation
  - Summary of the Remedial Investigation/Feasibility Study
  - Overview and rationale of Preliminary-alternatives, preliminary preferred alternative and the recommended option
- Questions on Approach from the Boards
- State Presentation
- Tribal Presentations

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### Remedial Investigation Highlights

- Multiple contaminants impact Portland Harbor
- Most significant and pervasive contaminants are:
  - PCBs
  - PAHs
  - DDT, DDE and DDD
- Pure product located in the river in multiple places
- Greatest risk to people who consume resident fish and shellfish from the site, although there are risks to people and wildlife from direct contact with sediment.

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## Slide 7

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**FS3** Why are we using McCormick and Baxter, since there were no RALs for sediment, only soil. Fish exposure was not a pathway for developing sediment cleanup levels.

Fonseca, Silvina, 11/22/2015

**FS4** Fonseca, Silvina, 11/22/2015

**FS5** Need a few more items to support E.


Fonseca, Silvina, 11/22/2015




## Option Presented to the Boards

- For the following 5 of 13 hotspots, Alternative E is modified accordingly:
  - River mile 5.5 East—Alternative F
  - River mile 6.5 East—Alternative B + PTW
  - River mile 6 Nav—Alternative B + PTW
  - River mile 6 West—Alternative D
  - River mile 7 West—Alternative F
- Based on current assumptions, cost estimate is \$1.4 billion and take 7 years to complete (costs being further refined)


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## Option Presented to the Boards




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## Rationale for Option Presented to the Boards

- Achieves similar risk reduction throughout the river
  - some areas receive more cleanup and some areas receive less
- Relies on natural recovery for most of the river cleanup
- Addresses PTW outside the hotspot areas
- Considered river restrictions due to caps and current or anticipated land/river use
- Considered ecological risks


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## Questions for the Board

- Thoughts on achieving same risk reduction throughout 13 hotspots at end of construction
- Use of a model for the site
- Thoughts on the model used by LWG
- Cost assumptions
  - Unit costs for dredging
  - Disposal costs
  - Mitigation costs
  - Unit costs for other work components

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## Summary of State and Tribal Comments


Oregon:

- Concerned about schedule—believe it's time to make a decision
- Believe their source control work will enable EPA cleanup to move forward
- Looking for opportunities to reduce costs
- Want less restrictions in the river/less reliance on fish advisories

Tribes:

- Want a remedy that achieves cleanup goals at the end of construction—suggest an alternative that goes beyond the most aggressive option—Alternative G+.
- Yakama care deeply about contaminant impacts to the Columbia.


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## Decision Tree Analysis

- Decision tree decisions based on several criteria, such as:
  - Location in the river: nearshore, intermediate zone or navigation channel?
  - Do concentrations exceed the RALs?
  - Is it PTW and outside of the hotspot areas? Can it be reliably contained?
  - Depth of contamination?
- Decision tree decisions will be based on design data enabling current conditions to dictate cleanup


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## Decision Tree Analysis

- Based on the decision tree, the sediment is either capped, dredged, treated in place or left to recover.
- Capping may include armoring or a reactive layer depending on the physical conditions of the area.
- Depending on depth of contamination, dredging may only accommodate a cap or remove contamination

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## Costs

- When this site's costs are compared to other large sediment site costs, these costs appear overestimated.
- Asked the NRRB/CSTAG to look at our costs
- The LWG has asked that costs be broken down by Sediment Decision Unit for their allocation process.
- EPA is working with the LWG in refining and making our cost estimates more clear.

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## Allocation

- Currently, there are about 80 (?) parties participating in an independent allocation process
- EPA is not part of the allocation process
- EPA is very interested in the success of an allocation process.

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## Public/Decision Process

### Pre-Proposed Plan – Community Engagement

- Winter 2015-March 2016—Highlights
  - Portland Harbor/Superfund 101 Community Sessions
  - Community Café – network community members around values, considerations of framing values to develop comments for PP
  - Technology talks – series of discussions on technologies evaluated in FS to reduce risk from contaminated sediment (presentation and narrated powerpoint)
  - CAG meetings (Ongoing monthly)
  - Discussion of health risk and Portland Harbor with most vulnerable youth and who may subsistence fish from the river.
  - Meetings with PHCC to discuss updates, grants and EJ expectations.
  - Quarterly information session with Oregon Tradeswomen students seeking to participate in the Superfund jobs readiness program
- Spring 2016—Proposed Plan and 60-day public comment period
- December 2016—Record of Decision

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